

Claims

1. A backlight assembly comprising:

5 a light source including a plurality of light generating parts that generate a first light; and

a light guide plate including i) side surfaces having a plurality of light incident surfaces, ii) a light exiting surface having a plurality of luminance-compensating patterns, and iii) a light reflecting surface facing the light exiting surface, the first light entering into the light guide plate via the light incident surface to form a second light, the second light being reflected on the light reflecting surface toward the light exiting surface to form a third light, the third light exiting from the light guide plate via the light exiting surface, the luminance-compensating patterns uniformizing a luminance of the third light, and a thickness of the light guide plate decreasing in a direction from the light incident surface to a center of the light guide plate.

10
15

2. The backlight assembly of claim 1, wherein the light guide plate comprises first, second, third and fourth side surfaces, and the light source comprises first and second light generating parts disposed adjacent to the first side surface and the second side surface facing the first side surface, respectively.

20

3. The backlight assembly of claim 2, wherein the thickness of the light guide plate decreases gradually to form an arch-shaped light reflecting surface.

25 4. The backlight assembly of claim 2, wherein the light source further comprises a third light generating part disposed adjacent to the third side surface of the light guide plate, and the first, second and third light generating parts are

integrally formed to form a U-shape.

5. The backlight assembly of claim 1, wherein the light guide plate comprises a first side surface, a second side surface neighboring the first side surface, a third side surface facing the first side surface, and a fourth side surface facing the second side surface, and the light source comprises a first light generating part disposed adjacent to the first side surface, a second light generating part disposed adjacent to the second side surface, a third light generating part disposed adjacent to the third side surface, and a fourth light generating part disposed adjacent to the fourth side surface.

6. The backlight assembly of claim 5, wherein the light reflecting surface has first, second, third and fourth curved faces, each of the curved faces having a predetermined curvature.

7. The backlight assembly of claim 5, wherein the first and second light generating parts are integrally formed to form a first L-shaped lamp, and the third and fourth light generating parts are integrally formed to form a second L-shaped lamp.

8. The backlight assembly of claim 1, further comprising a first reflecting member disposed under the light reflecting surface of the light guide plate, the first reflecting member reflecting a third light leaked from the light reflecting surface toward the light exiting surface, the first reflecting member comprising a metal plate and a reflective substance formed on the metal plate.

9. The backlight assembly of claim 8, further comprising a second

reflecting member covering the light sources to reflect the first light generated from the light source toward the light guide plate, and the first and second reflecting members being integrally formed with each other.

5 10. The backlight assembly of claim 1, wherein each of the luminance-compensating patterns has a same size, and the light-compensating patterns are formed denser in a region disposed near a center of the light guide plate than in a region disposed near the light generating part.

10 11. The backlight assembly of claim 1, wherein the luminance-compensating patterns are formed denser and have larger size in a region disposed near a center of the light guide plate than in a region disposed near the light generating part.

15 12. A liquid crystal display apparatus comprising:
a backlight assembly including, a) a light source including a plurality of light generating parts that generate a first light, and b) a light guide plate including i) side surfaces having a plurality of light incident surfaces, ii) a light exiting surface having a plurality of luminance-compensating patterns, and iii) a light reflecting
20 surface facing the light exiting surface, the first light entering into the light guide plate via the light incident surface to form a second light, the second light being reflected on the light reflecting surface toward the light exiting surface to form a third light, the third light exiting from the light guide plate via the light exiting surface, the luminance-compensating patterns uniformizing a luminance of the third
25 light, a thickness of the light guide plate decreasing in a direction from the light incident surface to a center of the light guide plate;
a receiving container for receiving the backlight assembly;

a liquid crystal display panel, received in the receiving container, for controlling a transmissivity of the second light using a liquid crystal to display an image; and

5 a top chassis, combined with the receiving container, for fixing the liquid crystal display panel to the receiving container.

13. The liquid crystal display apparatus of claim 12, further comprising a reflecting member disposed on a lower surface of the light reflecting surface of the light guide plate, the reflecting member reflecting a third light leaked from the light reflecting surface toward the light exiting surface, the reflecting member having a
10 same contour as that of the light reflecting surface of the light guide plate.

14. The liquid crystal display apparatus of claim 13, wherein a bottom face of the receiving container has a same contour as that of the light reflecting surface of the light guide plate, a electronic component being received in a receiving
15 space under the bottom face of the receiving container.

15. The liquid crystal display apparatus of claim 12, wherein the receiving container has a same contour as that of the light reflecting surface of the light guide plate and comprises a metal plate and a reflective substance formed on the metal plate, and the receiving container reflecting a third light leaked from the light reflecting surface toward the light exiting surface.
20